20

5

- 7. The method of claim 1, wherein the RNA in step (a) is extracted from plasma or serum using an RNA extraction method that is a gelatin extraction method; silica, glass bead or diatom extraction method; guanidine-thiocyanate-phenol solution extraction method; guanidinium thiocyanate acid-based extraction method; phenol-chloroform-based extraction method; or involves centrifugation through a cesium chloride or similar gradient.
- 8. The method of claim 2, wherein the RNA in step (a) is extracted from a bodily fluid using an RNA extraction method that is a gelatin extraction method; silica, glass bead, or diatom extraction method; guanidine-thiocyanate-phenol solution extraction method; guanidinium thiocyanate acid-based extraction method; phenol-chloroform-based extraction method; or involves centrifugation through a cesium chloride or similar gradient.
- 9. The method for screening an animal for malignancy or premalignancy associated with epidermal growth factor RNA, epidermal growth factor receptor RNA, her-2/neu RNA, c-myc RNA, or heterogeneous nuclear ribonucleoprotein A2/B1 RNA or any combination thereof, the method comprising the steps of performing the method of claim 1 qualitatively or quantitatively, and detecting a product produced by said RNA in the plasma or serum of said animal or human, wherein detection of said RNA indicates that malignant or premalignant cells are present in the body of said animal or human.

20

- 10. The method for screening an animal for malignancy or premalignancy associated with epidermal growth factor RNA, epidermal growth factor receptor RNA, her-2/neu RNA, c-myc RNA, or heterogeneous nuclear ribonucleoprotein A2/B1 RNA or any combination thereof, the method comprising the steps of performing the method of claim 2 qualitatively or quantitatively, and detecting a product produced by said RNA in the plasma or serum of said animal or human, wherein detection of said RNA indicates that malignant or premalignant cells are present in the body of said animal or human.
- 11. A method according to claim 9 wherein the animal is a human
- 12. A method according to claim 10 wherein the animal is a human
- 13. A method of identifying an animal or human having EGF, EGFr, her-2/neu, c-myc, or hnRNP A2/B1 expressing cells or tissue, the method comprising the steps of:
  - a) extracting mammalian RNA from a bodily fluid of the animal or human;
  - b) amplifying a fraction of the extracted RNA or cDNA corresponding thereto,
    wherein said fraction comprises EGF RNA, EGFr RNA, her-2/neu RNA, c-myc
    RNA, or hnRNP A2/B1 RNA or any combination thereof, and wherein
    amplification is performed qualitatively or quantitatively using primers specific
    for the RNA or cDNA corresponding thereto to produce an amplified product; and
  - c) detecting the amplified product produced from the RNA or cDNA corresponding thereto, whereby detection thereby identifies a human having EGF RNA, EGFr

20

RNA, her-2/neu RNA, c-myc RNA, or hnRNP A2/B1 RNA expressing cells or tissue.

- The method of claim 13, wherein the EGF RNA, EGFr RNA, her-2/neu RNA, c-myc
   RNA, or hnRNP A2/B1 RNA expressing cells or tissue comprise a malignancy, or premalignancy, or carcinoma in situ.
  - 15. The method of claim 13, wherein the animal or human is one having a risk for developing a malignancy or premalignancy.
  - 16. The method of claim 13, wherein the animal or human has been diagnosed as having a malignancy, premalignancy or carcinoma in situ.
  - 17. A method for detecting or diagnosing a disease associated with expression of epidermal growth factor RNA, epidermal growth factor receptor RNA, her-2/neu RNA, c-myc RNA, or heterogeneous nuclear ribonucleoprotein A2/B1 RNA .in an animal, the method comprising the steps of detecting an amplified product according to claim 1 and detecting or diagnosing a disease associated with expression of epidermal growth factor RNA, epidermal growth factor receptor RNA, her-2/neu RNA, c-myc RNA, or heterogeneous nuclear ribonucleoprotein A2/B1 RNA.
  - 18. A method for detecting or diagnosing a disease associated with expression of epidermal growth factor RNA, epidermal growth factor receptor RNA, her-2/neu RNA, c-myc